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Patent  
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March 3, 2006

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450


Re: **Application No.:** 10/601,813  
**Confirmation No.:** 9839  
**Applicants:** Ramachandran, et al.  
**Title:** Automated Banking Machine  
With Improved Resistance To Fraud  
**Docket No.:** D-1181 R1

Sir:

Please find enclosed the Appeal Brief of Appellant pursuant to 37 C.F.R. § 41.37 for filing in the above-referenced application.

If necessary, please charge a fee for the Appeal Brief (\$500) and any other fee due to Deposit Account 09-0428.

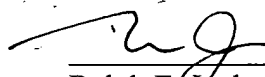
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D-1181 R1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
<b>Ramachandran, et al.</b>	)	
	)	
Application No.: <b>10/601,813</b>	)	Art Unit 2876
	)	
Confirmation No.: <b>9839</b>	)	
	)	
Filed: <b>June 23, 2003</b>	)	Patent Examiner
	)	Daniel Hess
	)	
Title: <b>Automated Banking Machine</b>	)	
<b>With Improved Resistance</b>	)	
<b>To Fraud</b>	)	

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**BRIEF OF APPELLANTS  
PURSUANT TO 37 C.F.R. § 41.37**

Sir:

The Appellants hereby submit their Appeal Brief pursuant to 37 C.F.R. § 41.37 concerning the above-referenced Application. This Appeal Brief is in response to the Office Action dated October 6, 2005.

(i)

**REAL PARTY IN INTEREST**

The Assignee of all right, title and interest to the above-referenced Application is Diebold, Incorporated, an Ohio corporation.

**(ii) RELATED APPEALS AND INTERFERENCES**

Appellants, Appellants' legal representative, and assignee believe that there are no related appeals or interferences pertaining to this matter.

(iii)

### **STATUS OF CLAIMS**

Claims 1-38 are pending in the Application.

Claims rejected: 1-37

Claims allowed: none

Claims confirmed: none

Claims withdrawn: 38 (Rejoinder thereof is respectfully requested)

Claim objected to: none

Claims canceled: none

Appellants appeal the rejections of claims 1-37, inclusive. These rejections were the only rejections present in the Office Action (“Action”) dated October 6, 2005, which was made Final.

(iv)

#### **STATUS OF AMENDMENTS**

A final rejection was made October 6, 2005. No claim amendments were requested to be admitted after the final rejection.

**(v) SUMMARY OF CLAIMED SUBJECT MATTER**

*Concise explanations of exemplary forms of the claimed invention:*

For reasons of brevity, claim language may be referred to herein (and in Appellants' arguments) in a shortened version. For example, language such as "at least one" may be simply referred to as "a". Any generalized statement in this Appeal Brief is not to limit any of the mentioned claims in any manner. Please refer to the specific claim for the exact claim language.

With respect to independent claim 1

An exemplary form of the invention is directed to an automated banking machine apparatus. The automated banking machine apparatus (e.g., 10; Figure 1) comprises a user interface (24) in supporting connection with a housing (12). The user interface (24) includes an input device and an output device (e.g., display 36). The input device includes a card reader (26; Figure 3). The card reader (26) has an associated card reader slot (28; Figures 1, 14, 15) that is adapted to accept user cards. A radiation emitting device (126; Figures 14-15) is positioned adjacent the slot (28). A radiation sensing device (128; Figures 14-15) is also adjacent the slot (28) such that positioning an unauthorized card reading device (130; Figure 15) adjacent the slot (28) causes a change in a property of radiation (that was emitted) from the radiation emitting device (126) to be sensed by the radiation sensing device (128) (e.g., Specification page 27, lines 7-15). A controller (72; Figure 3) is in the housing (12). The controller (72) is in operative connection with the radiation sensing device (128) (e.g., page 26, lines 9-10). The controller (72) is operative to generate a signal responsive to a sensed property change to indicate installation of an unauthorized card reading device (130) adjacent the card reader slot (28) (e.g., page 29, line 3 to page 30, line 14). Particularly note page 25, line 5 to page 30, line 14.

With respect to independent claim 16

Another exemplary form of the invention is directed to an automated banking machine apparatus. Support in the disclosure for like reference numerals have previously been provided. The apparatus includes a housing (12), user interface (24), card reader (26), card reader slot (28), output device (e.g., display 36), radiation emitting device (126), sensing device (e.g., 128), and controller (72).

The controller (72) is operative to cause prompting of a user to move a card in the slot (e.g., page 26, lines 2-4) and selectively cause operation of the radiation emitting device (e.g., page 26, lines 1-2; page 28, lines 1-4), where the operation is dependent on the prompting. The controller is operative to cause an output responsive to a sensing of an unauthorized card reading device (130) (e.g., page 29, line 3 to page 30, line 14).

With respect to independent claim 19

Another exemplary form of the invention is directed to an automated banking machine apparatus. Support in the disclosure for like reference numerals have previously been provided. The apparatus includes a slot member (e.g., 66) on a user interface (24) and bounding at least one side of a slot (28). A sensor device is positioned to detect an unauthorized object (130) placed adjacent the user interface (24). The sensor device includes a radiation emitting device (126) and a radiation sensing device (128) mounted in supporting connection with the slot member (e.g., 66) (Figures 1 and 14-15). The controller (72) is operative to selectively control the sensor device.



With respect to independent claim 23

Another exemplary form of the invention is directed to an automated banking machine apparatus. Support in the disclosure for like reference numerals have previously been provided. The apparatus includes a housing (12), user interface (24), card reader (26), card reader slot (28), and an output device (e.g., display 36). A sensing device (e.g., 128) positioned adjacent the card reader slot (28) is adapted to sense an unauthorized card reading device (130). A controller (72) is in the housing (12) and in operative connection with the sensing device (128). The controller (72) is operative to execute fuzzy logic (e.g., page 26, lines 15-17; page 28, lines 5-7) in comparing a stored value with a current value that corresponds to a signal currently produced by the sensing device (128). The controller (72) is further operative to produce an output responsive to a result of the comparison (e.g., page 29, line 3 to page 30, line 14).

With respect to independent claim 26

A further exemplary form of the invention is directed to a method. Support in the disclosure for like reference numerals have previously been provided. The method includes sensing with a sensing device (e.g., 128) adjacent to a card reader slot (28) of a user interface (24) of an automated banking machine (e.g., 10), an unauthorized card reader device (130) attached to the user interface. The sensing includes emitting radiation with an emitting device (126) located adjacent the slot (28). The sensing also includes sensing radiation from the emitting device (126) with a radiation sensor device (128) located adjacent the slot (28) and the emitting device (126). The sensing device is selectively controlled by a controller (72) of the

machine. The method further includes, responsive to sensing the unauthorized card reader device (130), providing at least one output from the machine (e.g., page 29, line 3 to page 30, line 14).

With respect to independent claim 32

A further exemplary form of the invention is directed to a method. Support in the disclosure for like reference numerals have previously been provided. The method includes operating a sensing device (e.g., 128) adjacent to a card reader slot (28) of a user interface (24) of an automated banking machine (e.g., 10). The method also includes executing fuzzy logic in comparing at least one property (sensed with the sensing device) to a stored value in determining whether an unauthorized card reader device (130) is attached to the user interface (24). The method further includes, responsive to determining that an unauthorized card reader device (130) is attached, providing an output from the machine (e.g., page 29, line 3 to page 30, line 14).

With respect to independent claim 35

A further exemplary form of the invention is directed to a method. Support in the disclosure for like reference numerals have previously been provided. The method includes operating a sensing device (e.g., 128) adjacent to a card reader slot (28) of a user interface (24) of an automated banking machine (e.g., 10) in a transaction step in which a card is to be moved in the card reader slot (28). The method also includes determining that an unauthorized card reader device (130) is attached to the user interface (24) responsive to the operating step. The method further includes, responsive to the determining step, capturing a card (that has been subject to

being read by the unauthorized reading device 130) through operation of the machine (e.g., page 30, lines 18-21).

With respect to independent claim 36

A further exemplary form of the invention is directed to a method. Note claim 35 for support for steps (a) and (b). Step (c) includes, responsive to the determining step, cancelling an account associated with a card that has been subject to being read by the unauthorized reading device (130) (e.g., page 30, lines 1-21).

With respect to independent claim 37

A further exemplary form of the invention is directed to a method. Note claim 35 for support for steps (a) and (b). Step (c) includes, responsive to the determining step, monitoring activity on an account associated with a card that has been subject to being read by the unauthorized reading device (130) (e.g., page 30, lines 6-8).

**(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The question presented in this appeal is:

Whether claims 1-37 are unpatentable pursuant to 35 U.S.C. § 103(a) over Mair, et al. (US 6,367,695) (hereinafter "Mair").

(vii)

## ARGUMENT

### The Applicable Legal Standards for 35 U.S.C. § 103 (a) Rejections

Before a claim may be rejected on the basis of obviousness pursuant to 35 U.S.C. § 103, the Patent Office bears the burden of establishing that all the recited features of the claim are known in the prior art. This is known as *prima facie* obviousness. To establish *prima facie* obviousness, it must be shown that all the elements and relationships recited in the claim are known in the prior art. If the Office does not produce a *prima facie* case, then the Appellants are under no obligation to submit evidence of nonobviousness. MPEP § 2142.

The teaching, suggestion, or motivation to combine the features in prior art references must be clearly and particularly identified in such prior art to support a rejection on the basis of obviousness. It is not sufficient to offer a broad range of sources and make conclusory statements. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Even if all of the features recited in the claim are known in the prior art, it is still not proper to reject a claim on the basis of obviousness unless there is a specific teaching, suggestion, or motivation in the prior art to produce the claimed combination. *Panduit Corp. v. Denison Mfg. Co.*, 810 F.2d 1561, 1568, 1 USPQ2d 1593 (Fed. Cir. 1987). *In re Newell*, 891 F.2d 899, 901, 902, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989).

Evidence of record must teach or suggest the recited features. An assertion of knowledge and common sense not based on any evidence in the record lacks substantial evidence support. *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1693 (Fed. Cir. 2001). Any rejection must be based on evidence of record. *In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

It is respectfully submitted that the Action requiring appeal does not meet these burdens.

**The 35 U.S.C. § 103(a) Rejections are legally improper**

**The rejections are devoid of any teaching, suggestion, or motivation**

Appellants traverse the rejections on the grounds that Appellants' claims recite features, relationships, and/or steps which are neither disclosed nor suggested in the prior art, and because there is no teaching, suggestion, or motivation cited so as to produce Appellants' invention. The features, relationships, and/or steps recited in Appellants' claims patentably distinguish over the applied reference.

**The rejections are based on hindsight reconstruction**

The only suggestion for the recited features, relationships, and/or steps is found in Appellants' own novel disclosure. It follows that the rejections are based solely on hindsight reconstruction of Appellants' claimed invention, which is legally impermissible and does not constitute a valid basis for a finding of obviousness. *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

**The Office has not established a *prima facie* showing of obviousness**

The Office has not established a *prima facie* showing of obviousness. The rejections are not supported by concrete evidence of record. *In re Zurko*, supra. *In re Lee*, supra. It would not have been obvious to one having ordinary skill in the art to have modified the reference as alleged to have produced the recited invention. Thus, Appellants respectfully submit the rejections are improper and should be reversed.

### **The Claims Are Not Obvious Over Mair**

Claims 1-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mair.

Appellants respectfully submit that the Office has not properly conducted a *Graham v. John Deere Co.* analysis. For example, the Action fails to ascertain the "differences" between Mair and the claims at issue. Thus, the Office has not met the basic criteria for establishing a *prima facie* case of obviousness. Thus, Appellants respectfully submit that the rejections should be reversed.

Furthermore, the Office's conclusions are cryptic and not supported by the record. Since the Action fails to explain with reasonable specificity at least one rejection, the Office also procedurally fails to establish a *prima facie* case of obviousness. *Ex parte Blanc*, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989). Moreover, because the basis for rejection has not been presented, Appellants have not been given a fair opportunity to properly reply. Again, Appellants respectfully submit that the rejections should be reversed.

The Office cannot withhold from the record the reasons for rejection. The Appellants have a right to view the evidence on which their claim for patent is being denied. Anything less is an attempt by the Office to clandestinely and unfairly reject without having to explain on the record the basis for rejection.

The Appellants are not required to prove patentability. Conversely, it is the Office which must establish a *prima facie* case of obviousness under the law. Otherwise, the Office is legally required to grant a patent.

### Claim 1

Mair does not teach or suggest having *both* a radiation emitting device *and* a radiation sensing device positioned adjacent a card reader slot

Mair does not teach or suggest having a radiation emitting device and a radiation sensing device where *both* devices are positioned adjacent the same card reader slot (e.g., Appellants' Figure 14). Mair's Figure 2 relates to a false keypad (21), not an unauthorized card reader. In Mair's Figure 3 the emitter (108) is specifically positioned operationally away from the card reader slot (12) for concealment behind the monitor screen (116) (e.g., col. 5, lines 29-31). As the applied prior art does not teach or suggest the recited features, the Office has not established a *prima facie* case of obviousness.

Furthermore, Mair structurally teaches against the recited invention. For example, note Mair's operational alignment of the detector (102) and the emitter (108) in Figure 3 (and the similar alignment in Figure 2). One having ordinary skill in the art would recognize that the size of Mair's detector (102) and emitter (108) would prevent their operational positioning adjacent to the card reader slot (12). That is, Mair not only lacks the recited apparatus and any suggestion for modification, but Mair is also not capable of being structurally modified to produce the recited apparatus. It follows that it would not have been obvious to one having ordinary skill in the art to have modified Mair to have produced the recited apparatus.



Mair does not teach or suggest signal generation responsive to sensing radiation

Claim 1 recites that a radiation sensing device is adjacent the card reader slot such that a positioning of an unauthorized card reading device adjacent the slot causes a change in at least one property of radiation (that was emitted from the radiation emitting device) that is sensed by the radiation sensing device. Claim 1 further recites that a controller is operative to generate a signal responsive to the sensed change, whereby installation of an unauthorized card reading device adjacent the slot is indicated.

That is, in the recited arrangement an unauthorized card reading device positioned adjacent the card reader slot causes: a change in a property of emitted radiation; a sensing of the change by a radiation sensing device; and a generation of a signal (indicative of the unauthorized card reading device) responsive to the sensed change. Conversely, in Mair's arrangement a false sheet (118) causes: an interruption of emitted signals so they don't reach the detector (102) (col. 5, lines 41-42); an absence of sensing radiation with the detector; and a remotely located alarm generation responsive to the absence of sensed radiation.

In claim 1 an unauthorized card reading device is detected because of a sensing of radiation by a radiation sensing device. In Mair's arrangement (col. 5, lines 15-44) a false sheet (118) is detected because of a lack of sensing of signals by a detector (102). Mair's arrangement is based on emitted signals not reaching the detector (col. 5, lines 1 and 39-44). That is, in Mair alarm generation is based on emitted signals not being sensed. Conversely, in claim 1 signal generation is based on emitted radiation being sensed by the radiation sensing device. If Mair's emitted signals don't reach the detector, then how can these signals be sensed by the detector to

cause alarm generation? They can't. Nor can Mair teach or suggest the recited features and relationships in claim 1. The Office has not established a *prima facie* case of obviousness.

Mair does not teach or suggest sensing "a change in at least one property of radiation"

In claim 1 the radiation sensing device senses a "change in at least one property of radiation". Further, the indicative signal is generated responsive to this sensed change. Where does Mair's detector (40) sense a "change in at least one property of radiation"? As previously discussed, Mair's alarm generation is based on not sensing any radiation with a detector, let alone sensing a "change in at least one property of radiation". If Mair doesn't sense radiation with a detector, then how can he sense a "change in at least one property of radiation" with the detector? He can't. Where does Mair sense radiation that has been changed, especially with a detector? He doesn't. In Mair there is no sensing of a changed property of radiation by a radiation sensing device. It follows that Mair cannot teach or suggest the recited features and relationships. The Office has not established a *prima facie* case of obviousness.

Mair does not teach or suggest an unauthorized card reading device

Mair is directed to preventing unauthorized obtainment of both a magnetic strip card and a PIN associated with the card (col. 1, lines 19-27 and 36-40). Mair indicates that a false keypad (21) can be fraudulently used to obtain a card's PIN whereas a false sheet (118) having a false card reader slot can be fraudulently used to physically capture the card. Mair tries to prevent use of both a false keypad (21) and a false card reader slot (118).

Where does Mair teach or suggest use of a false *card reading* device (i.e., an unauthorized card reading device)? There is no teaching or suggestion that Mair is concerned with preventing fraudulent reading of a card at the ATM. At best, Mair is concerned with preventing the physical capture a card via a user inserting their card in a false card reader slot (118) that is part of a false sheet (as shown in Figure 3). Even Mair acknowledges the "false card reader slot" (col. 5, line 40). There is no teaching or suggestion that an unauthorized card reading device is part of the false card reader slot or the false sheet. Mair's false card reader slot (118) is just that, a false slot in which a card can be fraudently captured.

Mair 's concern about preventing the taking of the entire card indicates that he is not concerned about preventing a reading of the card. Why would Mair prevent card reading but allow theft of the card, especially when the stolen card can be read later? Again, the false card reader slot (118) is limited to card capture.

Mair is non analogous to the problem and environment of unauthorized card reading devices. It follows that Mair also does not teach or suggest an ability to sense an unauthorized card reading device. The Office has not established a *prima facie* case of obviousness.

Mair's arrangement cannot address the problem solved by Appellant's invention

Mair's detection arrangement can be easily evaded rendering it useless for its intended purpose. For example, Mair's detection approach can be easily evaded by placing a fiber optic strand through in the large area between the emitter and the detector. However, in an exemplary arrangement of Appellants' invention, *both* the emitting device and the sensing device are adjacent the card reader slot. Thus, the exemplary arrangement renders a fiber optic strand

useless because it would interfere with (and prevent) card entry into the slot. It follows that Appellants' exemplary form of the invention further distinguishes from Mair.

#### Claim 1 conclusion

The 35 U.S.C. § 103(a) rejection of claim 1 is based on Mair alone. However, Mair is devoid of any teaching, suggestion, or motivation for combining features thereof so as to produce Appellants' recited invention. Appellants respectfully submit that in light of the failure of the solely applied reference to teach or suggest all of the recited features and relationships, combined with the lack of any other supporting evidence of record, the rejection is not legally valid. The record lacks evidential support for the rejection. *In re Zurko*, supra. *In re Lee*, supra.

The Office has not factually established a *prima facie* conclusion of obviousness. It would not have been obvious to one having ordinary skill in the art to have modified Mair as alleged to have produced the recited invention. Thus, Appellants respectfully submit that the rejection of claim 1 should be reversed.

#### Claim 2

Since Mair does not teach or suggest the recited apparatus of claim 1, Mair further cannot teach or suggest the additional currency dispensing device of claim 2, which depends on claim 1. The Office has not established a *prima facie* case of obviousness.

#### Claim 3

Claim 3 depends from claim 2/1. Mair further does not teach or suggest a radiation emitting device that emits visible light. Conversely, Mair specifically teaches against using visible light. Mair prefers that the emitter and the detector utilize infra-red radiation because it is

invisible to humans, and the presence of such a monitoring system would not be apparent to users (col. 2, lines 29-33). Furthermore, because the ATM fascia portion (114) is transparent to infra-red radiation but not transparent to visible light (col. 5, lines 26-29), Mair's system could not operate with visible light. Thus, Mair specifically teaches emitting radiation that is not visible to humans. The Office has not established a *prima facie* case of obviousness.

#### **Claim 4**

Claim 4 depends from claim 2/1. Mair further does not teach or suggest emitting radiation during at least one of a transaction step when a user card is to be inserted in the slot and a further transaction step when a user card is to be taken from the slot.

The Action (on page 7) asserts that "The emitter works on an essentially intermittent basis, and this will at times be on insertion and withdrawal". The Appellants respectfully disagree. Although Mair may emit signals at timed intervals (col. 5, lines 32-33), he is silent as to the time length between emissions. The Office has not presented any evidence of record that Mair teaches or suggests that radiation would be emitted during (1) when a user card is to be inserted in the slot or (2) when a user card is to be taken from the slot. Nor has the Office shown that Mair would need to emit radiation during these short time periods. One skilled in the art would recognize that Mair is concerned with detection before a transaction even begins (e.g., note Appellants' claim 35 remarks), not when a card needs to be inserted or removed. The rejection depends on pure speculation and not concrete evidence of record. *In re Zurko*, supra. *In re Lee*, supra. The rejection is based on impermissible hindsight reconstruction of Appellants' claimed invention. *In re Fritch*, supra. The Office has not factually established a *prima facie* case of obviousness.

### **Claim 5**

Claim 5 depends from claim 4/2/1. Mair further does not teach or suggest the ability to cause a value corresponding to a property of radiation *sensed* by the radiation sensing device to be stored in a data store. Where does Mair store in a data store a value corresponding to a sensed property of radiation? Even if Mair taught (which he doesn't) a stored "baseline" as alleged in the Action (at page 7), the baseline would be fixed. Mair does not teach or suggest that the alleged baseline would be that of a *sensed* radiation property value. The relied upon section (col. 3, lines 55-65) of Mair is not germane to the recited subject matter. The Office has not established a *prima facie* case of obviousness.

### **Claim 6**

Claim 6 depends from claim 5/4/2/1. For reasons already discussed, Mair further does not teach or suggest the ability to compare a stored sensed radiation property value with a current sensed radiation property value. The relied upon section (col. 3, lines 55-65) of Mair is not relevant to the recited subject matter. The Office has not established a *prima facie* case of obviousness.

### **Claim 7**

Claim 7 depends from claim 6/5/4/2/1. Mair further does not teach or suggest the ability to compare a stored radiation property value with a current radiation property value (e.g., claim 6) to determine a difference (e.g., claim 7). Where does Mair determine a difference? Nor does Mair teach or suggest that responsive to determining the difference, causing a *status message* to be sent by the machine to a remote computer. The Office has not established a *prima facie* case of obviousness.

### **Claim 8**

Claim 8 depends from claim 6/5/4/2/1. Mair further does not teach or suggest the ability to compare a stored radiation property value with a current radiation property value (e.g., claim 6) to determine a difference (e.g., claim 8). Where does Mair determine a difference? Nor does Mair teach or suggest that responsive to determining the difference, causing an output message to be output through an output device of the user interface. Where does Mair provide an output at the ATM? Conversely, Mair teaches that the alarm is remotely located from the ATM user (col. 3, lines 21-24).

The allegation at Action page 7 that Mair's "ATM is deactivated if an object is detected, this would certainly somehow, be reflected on the user interface" is without factual support. The Action's relied upon "somehow" language smacks of pure speculation. Regardless, how could a message "be output through at least one output device on the user interface" if Mair's ATM was not even active? The Office has not established a *prima facie* case of obviousness.

### **Claim 9**

Claim 9 depends from claim 8/6/5/4/2/1. Mair further does not teach or suggest an output message at the ATM that advises of a possible object near the slot.

The allegation at Action page 7 that in Mair "the user will wonder otherwise why an alarm is suddenly going off" is without basis and is contrary to the teaching of Mair. Mair's alarm is not for notifying the ATM user. Mair specifically teaches that the alarm is remotely located from the ATM user (col. 3, lines 21-24). The Office has not established a *prima facie* case of obviousness.

### **Claim 10**

Claim 10 depends from claim 6/5/4/2/1. Mair further does not teach or suggest the ability to change the stored sensed radiation property value responsive to a current sensed radiation property value. Even if Mair taught (which he doesn't) a stored "baseline" as alleged in the Action (at page 7), the baseline would be fixed. Mair does not teach or suggest that the alleged baseline would be changed, especially in response to a current *sensed* radiation property value. The Office has not established a *prima facie* case of obviousness.

### **Claim 11**

Claim 11 depends from claim 3/2/1. Mair further does not teach or suggest at least one radiation emitting device that can surroundingly illuminate a card reader slot. Where does Mair teach or suggest that the emitter (108) *both* emits radiation and illuminates a card reader slot? As previously discussed (claim 3 remarks), Mair specifically teaches emitting radiation that is not visible to humans. Where does Mair teach or suggest the ability to both guide a user to the card reader slot (via the illumination) and sense an unauthorized card reading device adjacent to the card reader slot? The Office has not established a *prima facie* case of obviousness.

### **Claim 12**

Claim 12 depends from claim 6/5/4/2/1. Mair further does not teach or suggest the ability to compare the stored sensed radiation property value with a current sensed radiation property value at a time when a transaction is not being conducted by a user at the apparatus. The Office has not established a *prima facie* case of obviousness.



### **Claim 13**

Claim 13 depends from claim 6/5/4/2/1. Mair further does not teach or suggest executing fuzzy logic in comparing a current sensed radiation property value with a stored sensed radiation property value. Although fuzzy logic may be known (e.g., Microsoft Computer Dictionary), where does Mair discuss or even mention using fuzzy logic, as alleged? The Office has not established a *prima facie* case of obviousness.

### **Claim 14**

Mair further does not teach or suggest a radiation emitting device and a radiation sensing device mounted in supporting connection with a housing member that bounds at least one side of a card reader slot. The Office's reliance (at Action page 8) on Mair's Figure 2 is lacking. First, where does Figure 2 show a card reader slot? Figure 2 is directed to a false keypad (21), not a card reader slot. Second, where is the recited "housing member" in Figure 2? The Action is silent as to what constitutes the recited housing member. Third, how is the emitter (34) and the detector (40) mounted in supporting connection with a housing member that bounds a card reader slot? The Office has not established a *prima facie* case of obviousness.

### **Claim 15**

Claim 15 depends from claim 14/1. Mair further does not teach or suggest the recited housing member extending in surrounding relation of a card reader slot. The Action's reference to Figure 1 is lacking. Figure 1 does not show a housing member bounding and extending in surrounding relation of the card reader slot (12), especially where the emitter (34) and the detector (40) are mounted in supporting connection with the housing member. The Office has not established a *prima facie* case of obviousness.

### **Claim 16**

Appellants' remarks in support of the patentability of claim 1 are incorporated herein by reference. The Action's reference (at page 8, last paragraph) to "selectively causing the sensing device to operate" is moot as this language is not recited.

For reasons already discussed, Mair does not teach or suggest the recited apparatus. For example, Mair does not teach or suggest a sensing device that is adapted to sense an unauthorized card reading device positioned adjacent a card reader slot. As previously discussed, Mair does not teach or suggest sensing an unauthorized card reading device. At best, Mair tries to prevent use of a false card reader slot (118) , not a false *card reading* device.

There is no evidence of record whatsoever that Mair "prompts card input" as alleged at Action page 9, first paragraph. Mair does not teach or suggest prompting a user to move a card in a card reader slot. Where does Mair teach or suggest prompting a user to move a card in a card reader slot? Mair teaches that "When a user inserts their card 14 in the slot 12, the ATM 10 displays a message on the screen 18, prompting the user to enter their PIN on the keypad 16" (col. 4, lines 37-39). That is, at best a PIN entry prompt follows card insertion.

Mair further does not teach or suggest that operation of a radiation emitting device is *dependent* on prompting a user to move a card in a card reader slot. Mair teaches that "signals are emitted by the emitter 108 at timed intervals" (col. 5, lines 32-33). Mair's emitted signals are not dependent on any prompting of a user, especially a prompting to move a card in a card reader slot. Mair's signals appear to be emitted regardless of whether or not a user is at the ATM. Thus, it would not have been obvious to one having ordinary skill in the art to make operation of Mair's

emitter (108) dependent on prompting a user to move a card in a card reader slot. The Office has not factually established a *prima facie* conclusion of obviousness.

#### **Claim 17**

Since Mair does not teach or suggest the recited apparatus of claim 16, Mair further cannot teach or suggest the additional radiation sensing device of claim 17, which depends on claim 16. The Office has not established a *prima facie* case of obviousness.

#### **Claim 18**

Claim 12 depends from claim 17/16. Mair further does not teach or suggest a sensing device and a radiation emitting device both positioned adjacent the card reader slot, and the radiation sensing device can sense radiation emitted by the at least one radiation emitting device. One having ordinary skill in the art would understand that Mair's emitting device (108) and detector (102) are not "positioned adjacent" the same card reader slot. The Office has not established a *prima facie* case of obviousness.

#### **Claim 19**

Appellants' remarks in support of the patentability of claims 1 and 16 are incorporated herein by reference. For reasons already discussed, Mair does not teach or suggest the recited apparatus. For example, as previously discussed (e.g., claim 1 remarks), Mair does not teach or suggest *both* a radiation emitting device and a radiation sensing device positioned adjacent to the same slot.

Mair further does not teach or suggest a radiation emitting device and a radiation sensing device mounted in supporting connection with a "slot member" on the user interface and bounding at least one side of a slot. As previously discussed, an exemplary form of the invention

includes a radiation emitting device (126) and a radiation sensing device (128) mounted in supporting connection with a slot member (66) (Figures 1 and 14-15).

The Action states (on page 9) that "In this example the detector 102 is positioned at the top edge of slot 12". So. Where in Mair is a radiation emitting device mounted (along with the sensing device 102) in supporting connection with a slot member bounding the slot (12)? The Action is conveniently silent as to where Mair's emitting device (108) is positioned. Regardless, the emitting device (108) is not mounted as recited in Appellant's claim. The Office has not factually established a *prima facie* conclusion of obviousness.

#### **Claim 20**

Claim 20 depends from claim 16. Mair further does not teach or suggest the ability to store in the data store a value responsive to a signal from the sensing device; compare the stored value to a current value (which corresponds to a signal currently produced by the sensing device); and produce the output responsive to a result of the comparison (and sensed unauthorized card reading device). The Office has not established a *prima facie* case of obviousness.

#### **Claim 21**

Claim 21 depends from claim 16. Mair further does not teach or suggest producing a status message as a result of comparing a stored value to a current value (which corresponds to a signal currently produced by the sensing device). The Office has not established a *prima facie* case of obviousness.

#### **Claim 22**

Claim 22 depends from claim 20/16. Mair further does not teach or suggest the ability to cause a stored value to be changed responsive to a current value. Even if Mair taught (which he

doesn't) a stored "baseline" as alleged in the Action (at page 7), the baseline would be fixed.

Mair does not teach or suggest that the alleged baseline would be changed, especially in response to a currently produced value. The Office has not established a *prima facie* case of obviousness.

### **Claim 23**

Appellants' remarks in support of the patentability of claims 1, 16, and 19 are incorporated herein by reference. For reasons already discussed, Mair does not teach or suggest the recited apparatus.

For reasons previously discussed, Mair also does not teach or suggest the ability to sense an unauthorized card reading device. As previously discussed, at best, Mair tries to prevent use of a false card reader slot (118), not a false *card reading* device. That is, Mair does not teach or suggest sensing an unauthorized card reading device. The Office has not established a *prima facie* case of obviousness.

Mair does not teach or suggest using fuzzy logic, especially in comparing a stored value and a current value corresponding to a signal currently produced by a sensing device that is adapted to sense an unauthorized card reading device. It follows that Mair cannot produce an output responsive to a result of the comparison.

The Office's assertion of fuzzy logic in Mair is not based on any evidence in the record. However, the law requires that the evidence of record must teach or suggest the recited features in order to establish a valid rejection. *In re Zurko*, supra. *In re Lee*, supra.

Although fuzzy logic may be known in other fields of endeavor (e.g., a Microsoft Computer Dictionary), where does Mair discuss or even mention using fuzzy logic, as alleged? He doesn't. Mair at the relied upon col. 5, lines 45-55, does not teach or suggest the recited

features. Nor does Mair have any need of fuzzy logic. Conversely, Mair's alarm prevention is based on using a fixed "predetermined time interval" (col. 5, lines 49-50). The Office has not established a *prima facie* case of obviousness.

Furthermore, where does Mair execute fuzzy logic in *comparing* a stored value to a current value (corresponding to a sensed signal), especially where an output is produced responsive to a *result of the comparison*. In Mair an output (i.e., alarm) is produced based on no signal being detected. The alarm is not produced in response to a comparison of signals. That is, Mair does not "produce at least one output responsive to a result of the comparison". The Office has not established a *prima facie* case of obviousness.

Although Mair can use emitted coded signals, there is no teaching or suggestion that an alarm is triggered as a result of coded signals being compared (and not matching). Rather, Mair indicates that the purpose of emitting coded signals is simply to "make it more difficult to imitate the emitted signal" (col. 2, lines 62-65). This is because if Mair's signal code can be broken then his system can be easily fooled. Again, the Office has not factually established a *prima facie* conclusion of obviousness.

#### **Claim 24**

Claim 24 depends from claim 19. Appellants' remarks in support of the patentability of claim 14 are incorporated herein by reference. Mair further does not teach or suggest a radiation emitting device and a radiation sensing device mounted on opposite sides of the same slot. The Office has not established a *prima facie* case of obviousness.

### **Claim 25**

Claim 25 depends from claim 24/19. Appellants' remarks in support of the patentability of claims 3, 11, 14 are incorporated herein by reference. Mair further does not teach or suggest a slot member that extends in generally surrounding relation of a card slot, and a radiation emitting device is operative to visibly illuminate an area surrounding the card slot. Where does Mair teach or suggest the recited "slot member"? Where does Mair teach or suggest that the emitter (108) *both* emits radiation and illuminates a card slot? As previously discussed (claim 3 remarks), Mair specifically teaches emitting radiation that is not visible to humans. That is, Mair specifically teaches against the recited invention. The Office has not established a *prima facie* case of obviousness.

### **Claim 26**

Appellants' remarks in support of the patentability of claims 1, 16, 19, and 23 are incorporated herein by reference. For reasons already discussed, Mair does not teach or suggest the recited method.

As previously discussed (e.g., claims 1 and 19 remarks), Mair does not teach or suggest *both* an emitting device and a radiation sensor device located adjacent to the same card reader slot, especially where the radiation sensor device is located adjacent the emitting device. One having ordinary skill in the art would understand that Mair's emitting device (108) and detector (102) are not "located adjacent" each other *and* the same card reader slot. The Office has not established a *prima facie* case of obviousness.

For reasons previously discussed, Mair also does not teach or suggest sensing an unauthorized card reader device attached to the user interface. As previously discussed, at best,

Mair tries to prevent use of a false card reader slot (118), not a false *card reading* device. That is, Mair does not teach or suggest sensing an unauthorized card reader device. Again, the Office has not factually established a *prima facie* conclusion of obviousness.

#### **Claim 27**

Since Mair does not teach or suggest the recited method of claim 26, Mair further cannot teach or suggest sending a status message from the machine responsive to sensing an unauthorized card reader device as recited in claim 27, which depends on claim 26. The Office has not established a *prima facie* case of obviousness.

#### **Claim 28**

Claim 28 depends from claim 26. Appellants' remarks in support of the patentability of claims 8 and 9 are incorporated herein by reference. Mair further does not teach or suggest providing a notice indicating the presence of a possible unauthorized reader device to a user of the machine through at least one output device. Where does Mair output a notice to an ATM user of a possible unauthorized reader device? As previously discussed, Mair's alarm is not for notifying the ATM user. Mair teaches that the alarm is remotely located from the ATM user (col. 3, lines 21-24). The Office has not established a *prima facie* case of obviousness.

#### **Claim 29**

Claim 29 depends from claim 26. For reasons already discussed, Mair also does not teach or suggest a radiation emitting device and a radiation sensing device arranged on opposite sides of the same slot. The Office has not established a *prima facie* case of obviousness.



### **Claim 30**

Claim 30 depends from claim 29/26. For reasons already discussed (e.g., remarks to claims 6, 20, and 23), Mair further does not teach or suggest comparing a property of radiation sensed from a sensor device to a stored value. The Office has not established a *prima facie* case of obviousness.

### **Claim 31**

Claim 31 depends from claim 30/29/26. For reasons already discussed (e.g., remarks to claims 10 and 22), Mair also does not teach or suggest changing a stored value responsive to radiation sensed. The Office has not established a *prima facie* case of obviousness.

### **Claim 32**

Appellants' remarks in support of the patentability of claims 1, 16, 19, 23, and 26 are incorporated herein by reference. For reasons already discussed, Mair does not teach or suggest the recited method.

For reasons already discussed (e.g., claim 23 remarks), Mair does not teach or suggest using fuzzy logic in comparing a sensing to a stored value in determining whether an unauthorized card reader device is attached to a user interface. For reasons already discussed, Mair also doesn't teach or suggest sensing an unauthorized card reader device attached to a user interface. At best, Mair tries to prevent use of a false card reader slot (118), not a false *card reading* device. The Office has not factually established a *prima facie* conclusion of obviousness.

### **Claim 33**

Claim 33 depends from claim 26. For reasons already discussed (e.g., remarks to claims 3 and 25), Mair also does not teach or suggest operating a radiation emitting device to emit

visible light. Where does Mair teach or suggest that the emitter (108) emits visible light? As previously discussed, Mair specifically teaches emitting radiation that is not visible to humans. That is, Mair specifically teaches against the recited invention. The Office has not established a *prima facie* case of obviousness.

#### **Claim 34**

Claim 34 depends from claim 33/26. For reasons already discussed (e.g., remarks to claims 11 and 25), Mair also does not teach or suggest that a radiation emitting device illuminates a card reader slot. The Office has not established a *prima facie* case of obviousness.

#### **Claim 35**

Appellants' remarks in support of the patentability of claims 1, 16, 19, 23, 26, and 32 are incorporated herein by reference. For reasons already discussed, Mair does not teach or suggest the recited method.

Mair does not teach or suggest that any sensing actually occurs in a transaction step in which a card is to be moved in a card reader slot. Where is this step taught or suggested in Mair? The Office has not established a *prima facie* case of obviousness.

For reasons already discussed, Mair also doesn't teach or suggest determining an unauthorized card reader device is attached to the user interface (step b). At best, Mair tries to prevent use of a false card reader slot (118), not a false *card reading* device. The Office has not established a *prima facie* case of obviousness.

Even if it were somehow possible (which it isn't) for Mair to determine that an unauthorized card reader device is attached to the user interface, Mair still wouldn't teach or suggest recited step (b). Step (b) is "responsive to step (a)". That is, Mair still would not teach

or suggest "determining an unauthorized card reader device is attached to the user interface responsive to" "operating at least one sensing device adjacent to a card reader slot . . . in a transaction step in which a card is to be moved in the card reader slot". The Office has not established a *prima facie* case of obviousness.

Mair further does not teach or suggest (step c) that in response to determining an unauthorized card reader, capturing a card (that has been subject to being read by the determined unauthorized card reader). Where does Mair teach or suggest the recited card capturing through operation of the machine?

The Action (on page 10) asserts that "If the card is in the ATM when it is deactivated it would likely remain in the ATM". However, the Office has not presented any evidence of record that in Mair a user card would be in the ATM at the time of the alleged determining of an unauthorized card reader (or during the alleged ATM deactivation). Conversely, Mair's system can "accommodate normal usage of the ATM" such "that use of the card reader slot 12 by a user . . . will not result in issue of spurious alarm signals" (col. 5, lines 46-53).

If Mair's ATM is immediately deactivated upon indication of fraud (as alleged by the Office), then it is designed such that deactivation would occur before a user card could even be inserted in the ATM. That is, a card wouldn't even be in Mair's ATM when it is deactivated, let alone be captured by the ATM. Mair's system would not permit a user card to have "been subject to being read" by an unauthorized card reader. If Mair's user card was never subject to being read, then why would it need to be captured by the ATM? The rejection is based on impermissible hindsight reconstruction of Appellants' claimed invention. *In re Fritch*, supra. The Office has not established a *prima facie* case of obviousness.

Furthermore, even if it were somehow possible (for the sake of argument) for Mair to have a card "in the ATM when it is deactivated" (which Mair actually teaches against), Mair still wouldn't teach or suggest recited step (c). There would still be no teaching or suggestion that the card would be captured through operation of the ATM. What specific teaching or suggestion in Mair prevents or limits the card from being returned by the ATM to the user prior to (or during) the deactivation? At best, a card in Mair is captured by the false card slot, not through any operation of the ATM. The rejection is based on pure speculation and not concrete evidence of record. *In re Zurko*, supra. *In re Lee*, supra. The Office has not factually established a *prima facie* case of obviousness.

Additionally, the Action's noted assertion of "If the card is in the ATM when it is deactivated it would likely remain in the ATM" (on page 10) along with the rejection, is based on "if", "likely", and pure speculation. Again the rejection is not based on concrete evidence of record. Conversely, Appellants have established that a card won't even be in Mair's ATM when it is deactivated. Thus, a card can't be captured. Again, the Office has not factually established a *prima facie* conclusion of obviousness.

### **Claim 36**

Appellants' remarks in support of the patentability of claim 35 are incorporated herein by reference. For reasons already discussed (e.g., claim 35 remarks), Mair does not teach or suggest recited steps (a) or (b).

Mair also does not teach or suggest recited step (c). Mair does not teach or suggest that *responsive to* determining an unauthorized card reader, cancelling an account (associated with a

card that has been subject to being read by the unauthorized card reader). Where does Mair teach or suggest cancelling an account?

The Action's allegation that an ATM *user* in Mair would cancel their account "responsive to" determining (step b) an unauthorized card reader is without basis. Where does Mair teach or suggest notifying the ATM user (or making the user aware) of an unauthorized card reader?

Mair's alarm is not for notifying the ATM user. Mair teaches that the alarm is remotely located from the ATM user (col. 3, lines 21-24).

Additionally, for reasons previously discussed (e.g., claim 35 remarks), Appellants have established that a user card in Mair would not have "been subject to being read" by an unauthorized card reader. Mair's ATM would be deactivated before a card could even be read. If the card was never subject to being read, then why would an account need to be canceled? The Office has not factually established a *prima facie* conclusion of obviousness.

The statement in the Action that "This examiner has taken that kind of [Office] action in the past" is noted. The reliance by the Examiner on a previous Office action rejection (which is not of record) should have no bearing with regard to the current application.

### **Claim 37**

Appellants' remarks in support of the patentability of claims 35 and 36 are incorporated herein by reference. For reasons already discussed (e.g., claims 35 and 36 remarks), Mair does not teach or suggest recited steps (a) or (b).

Mair also does not teach or suggest recited step (c). Mair does not teach or suggest monitoring activity on an account, especially *responsive to* determining an unauthorized card reader. For reasons previously discussed (e.g., claim 35 remarks), Appellants have established

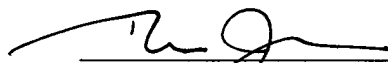
that a user card in Mair would not have "been subject to being read" by an unauthorized card reader. Mair's ATM would be deactivated before a card could even be read. If the card was never subject to being read, then why would activity on the card's account need to be monitored? The Office has not factually established a *prima facie* conclusion of obviousness.

The statement in the Action that "This examiner has taken that kind of [Office] action in the past" is noted. The reliance by the Examiner on a previous Office action rejection (which is not of record) should have no bearing with regard to the current application.

### CONCLUSION

Each of Appellants' pending claims specifically recites features, relationships, and/or steps that are neither disclosed nor suggested in any of the applied prior art. Furthermore, the applied prior art is devoid of any teaching, suggestion, or motivation for combining features of the applied prior art so as to produce the recited invention. For these reasons it is respectfully submitted that all the pending claims are allowable.

Respectfully submitted,



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## CLAIMS APPENDIX

1. An automated banking machine apparatus comprising:

a housing;

a user interface in supporting connection with the housing, the user interface including at least one input device and at least one output device, wherein the at least one input device includes a card reader having an associated card reader slot adapted to accept cards input by users of the apparatus;

at least one radiation emitting device positioned adjacent the slot;

at least one radiation sensing device adjacent the slot such that positioning an unauthorized card reading device adjacent the slot causes a change in at least one property of radiation from the at least one radiation emitting device that is sensed by the at least one radiation sensing device;

at least one controller in the housing, wherein the at least one controller is in operative connection with the at least one radiation sensing device and is operative to generate at least one signal responsive to the change, whereby installation of an unauthorized card reading device adjacent the slot is indicated.

2. The apparatus according to claim 1 and further comprising a currency dispensing device in supporting connection with the housing.
3. The apparatus according to claim 2 wherein the at least one radiation emitting device is operative to emit visible light.
4. The apparatus according to claim 2 wherein the controller is operative to cause the apparatus to carry out a currency dispensing transaction, and wherein the controller is operative to cause the at least one radiation emitting device to initiate emitting radiation during at least one of a transaction step when a user card is to be inserted in the slot and a further transaction step when a user card is to be taken from the slot.
5. The apparatus according to claim 4 and further comprising at least one data store, wherein the controller is operative to cause at least one stored value corresponding to the at least one property of radiation sensed by the at least one radiation sensing device to be stored in the data store.
6. The apparatus according to claim 5 wherein the controller is operative to compare the at least one stored value with at least one current value corresponding to the at least one property of radiation currently sensed by the at least one radiation sensing device.



7. The apparatus according to claim 6 wherein the controller is operative responsive to determining a difference when comparing the at least one stored value to the at least one current value to cause a status message to be sent by the machine to a remote computer.
8. The apparatus according to claim 6 wherein the controller is operative responsive to determining a difference when comparing the at least one stored value to the at least one current value to cause an output message to be output through at least one output device on the user interface.
9. The apparatus according to claim 8 wherein the output message advises of a possible object near the slot.
10. The apparatus according to claim 6 wherein the controller is operative to change the at least one stored value responsive to the at least one current value.
11. The apparatus according to claim 3 wherein the at least one radiation emitting device is adapted to surroundingly illuminate the card reader slot.
12. The apparatus according to claim 6 wherein the controller is operative to compare the at least one stored value with the at least one current value at a time when a transaction is not being conducted by a user at the apparatus.

13. The apparatus according to claim 6 wherein the controller is operative to execute fuzzy logic in comparing the at least one current value with the at least one stored value.
14. The apparatus according to claim 1 and further comprising a housing member bounding at least one side of the card reader slot, and wherein the at least one radiation emitting device and the at least one radiation sensing device are mounted in supporting connection with the housing member.
15. The apparatus according to claim 14 wherein the housing member extends in surrounding relation of the card reader slot.
16. An automated banking machine apparatus comprising:
  - a housing;
  - a user interface in supporting connection with the housing,
  - wherein the user interface includes at least one input device and at least one output device,

wherein the at least one input device includes a card reader having  
an associated card reader slot adapted to accept cards input by  
users of the machine;

at least one radiation emitting device;

at least one sensing device,

wherein the at least one sensing device is adapted to sense an unauthorized  
card reading device positioned adjacent the card reader slot;

at least one controller in the housing and in operative connection with the at least  
one radiation emitting device and the at least one sensing device,

wherein the controller is operative to cause prompting of a user to move a  
card in the slot,

wherein the at least one controller is operative to selectively cause  
operation of the at least one radiation emitting device,

wherein the operation is dependent on the prompting

wherein the at least one controller is operative to cause at least one output responsive to a sensing of an unauthorized card reading device.

17. The apparatus according to claim 16 wherein the at least one sensing device comprises at least one radiation sensing device.

18. The apparatus according to claim 17 wherein the at least one sensing device and the at least one radiation emitting device are both positioned adjacent the card reader slot, wherein the at least one radiation sensing device is adapted to sense radiation emitted by the at least one radiation emitting device.

19. An automated banking machine apparatus comprising:

a user interface,

a slot member on the user interface and bounding at least one side of a slot,

at least one sensor device positioned to detect an unauthorized object placed adjacent the user interface,

wherein the at least one sensor device includes at least one radiation emitting device and at least one radiation sensing device mounted in supporting connection with the slot member,

at least one controller,

wherein the at least one controller is operative to selectively control the at least one sensor device.

20. The apparatus according to claim 16 wherein the at least one controller is in operative connection with at least one data store,

and wherein the at least one controller is operative to

cause to be stored in the at least one data store at least one stored value responsive to at least one signal from the at least one sensing device,

compare the at least one stored value to at least one current value corresponding to at least one signal currently produced by the at least one sensing device, and

produce the at least one output responsive to a result of the comparison.

21. The apparatus according to claim 16 wherein the at least one output comprises a status message.
22. The apparatus according to claim 20 wherein the at least one controller is further operative to cause the at least one stored value to be changed responsive to the at least one current value.
23. An automated banking machine apparatus comprising:
  - a housing,
  - a user interface in supporting connection with the housing, the user interface including at least one input device and at least one output device, wherein the at least one input device includes a card reader having an associated card reader slot adapted to accept cards input by users of the machine,
  - at least one sensing device positioned adjacent the card reader slot, wherein the at least one sensing device is adapted to sense an unauthorized card reading device positioned adjacent the card reader slot,
  - at least one controller in the housing and in operative connection with the at least one sensing device, wherein the at least one controller is operative to execute

fuzzy logic in comparing at least one stored value and at least one current value corresponding to at least one signal currently produced by the at least one sensing device, and wherein the at least one controller is operative to produce at least one output responsive to a result of the comparison.

24. The apparatus according to claim 19 wherein at least one radiation emitting device and at least one radiation sensing device are mounted on opposite sides of the slot.
25. The apparatus according to claim 24 wherein the slot comprises a card slot, wherein the slot member extends in generally surrounding relation of the card slot, and the at least one radiation emitting device is operative to visibly illuminate an area surrounding the card slot.
26. A method comprising:
  - (a) sensing with at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine, an unauthorized card reader device attached to the user interface,

wherein the sensing includes emitting radiation with at least one emitting device located adjacent the slot;

wherein the sensing includes sensing radiation from the at least one emitting device with at least one radiation sensor device located adjacent the slot and the at least one emitting device;

wherein the sensing device is selectively controlled by at least one controller of the machine;

(b) responsive to sensing the unauthorized card reader device, providing at least one output from the machine.

27. The method according to claim 26 wherein step (b) comprises sending a status message from the machine.
28. The apparatus according to claim 26 wherein step (b) comprises providing a notice indicating presence of a possible unauthorized reader device to a user of the machine through at least one output device.
29. The method according to claim 26 wherein at least one emitting device and at least one radiation sensor device are arranged on opposite sides of the slot, and wherein step (a) comprises:

sensing radiation emitted from an opposite side of the slot.



30. The apparatus according to claim 29 wherein step (a) further comprises:

comparing at least one property of radiation sensed from the at least one sensor device to at least one stored value.

31. The method according to claim 30 and further comprising:

(c) operating the at least one emitting device when no unauthorized card reader device is sensed;

(d) sensing radiation emitted in step (c) with at least one radiation sensor device;

(e) changing the at least one stored value responsive to radiation sensed in step (d).

32. A method comprising:

(a) operating at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine;

- (b) executing fuzzy logic in comparing at least one property of a sensing with the at least one sensing device to at least one stored value in determining whether an unauthorized card reader device is attached to the user interface; and
  - (c) responsive to determining an unauthorized card reader device is attached, providing at least one output from the machine.
- 33. The method according to claim 26 wherein the at least one emitting device emits visible light during operation, and further comprising:
  - (c) operating the at least one emitting device when the machine conducts a transaction step in which a card is to be removed from the slot.
- 34. The method according to claim 33 and prior to step (c) further comprising:
  - dispensing currency from the machine, and wherein in step (c) the at least one emitting device illuminates the slot in generally surrounding relation.
- 35. A method comprising:

- (a) operating at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine in a transaction step in which a card is to be moved in the card reader slot;
- (b) determining an unauthorized card reader device is attached to the user interface responsive to step (a);
- (c) responsive to step (b), capturing a card that has been subject to being read by the unauthorized reading device through operation of the machine.

36. A method comprising:

- (a) operating at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine in a transaction step in which a card is to be moved in the card reader slot;
- (b) determining an unauthorized card reader device is attached to the user interface responsive to step (a);
- (c) responsive to step (b), cancelling an account associated with a card that has been subject to being read by the unauthorized reading device.

37. A method comprising:

- (a) operating at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine in a transaction step in which a card is to be moved in the card reader slot;
- (b) determining an unauthorized card reader device is attached to the user interface responsive to step (a);
- (c) responsive to step (b), monitoring activity on an account associated with a card that has been subject to being read by the unauthorized reading device.

38. (withdrawn) A method comprising:

- (a) sensing with at least one sensing device adjacent to a card reader slot of a user interface of an automated banking machine, an unauthorized object adjacent to the card reader slot, wherein the at least one sensing device is selectively controlled by at least one controller of the machine;
- (b) responsive to the sensing in step (a), providing at least one output from the machine, wherein the at least one output includes requesting at least one

user input to the machine corresponding to an appearance of the user interface adjacent to the card reader slot;

- (c) receiving user input with the machine responsive to step (b);
- (d) operating the at least one controller to determine whether the unauthorized object sensed in step (a) is an unauthorized card reader device attached to the user interface responsive to the user input received in step (c); and
- (e) responsive to determining an unauthorized card reader device in step (d), providing at least one other output from the machine.

(ix)

## **EVIDENCE APPENDIX**

(None)

(x)

**RELATED PROCEEDINGS APPENDIX**

(None)